

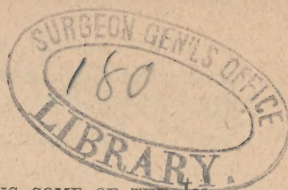
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DR. BEARD'S REPLY.

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BOX ITEM



THE GOSLING CASE, AS ILLUSTRATING AND ENFORCING SOME OF THE IM-  
PORTANT POSITIONS OF THE ESSAY ON "THE PROBLEMS OF IN-  
SANITY."

The discussion of the Gosling case, at the last meeting of the Society, was really a discussion of the paper on "The Problems of Insanity," although not so designed, since, in a remarkable way, it illustrated, emphasized, enforced and brought into relief, a number of the more important distinctive propositions of my essay.

First of all, the Gosling case illustrated the need of a definition of insanity. Those who listened to the discussion the other evening will remember that different speakers were talking about different subjects; some emphasized the *physical* symptoms, some the *psychical* symptoms; some were arguing that because Mr. Gosling had good muscles, and could lift his arms vigorously, and could walk vigorously, he was, therefore, not insane; one would have supposed, from the turn that the discussion took on both sides, that insanity was a disease in which muscular co-ordination was slightly impaired. Others argued that because he could write a long legal document he was not insane. There was, indeed, no agreement expressed or assumed among the different physicians on both sides of that case as to what insanity was. A person listening to one speaker might suppose that insanity was simply a sign of disease of the muscles. Indeed, a considerable portion of the discussion was devoted to that side of the subject, as though the psychological element of insanity were a minor matter. If there had been no other case before us during the last few years this Gosling case alone would suffice to impress upon us the necessity of having some definition of what we are talking about when we speak of insanity.

*Secondly.* The Gosling case illustrates the difficulty of diagnosis at times, even in very positive cases of insanity. There seems to be no question whatever that, since the first outbreak of insanity in Mr. Gosling, there had been a decided remission, even though it were not absolute; and those who saw him during that remission, and only then, saw him at a disadvantage for a full diagnosis.

There are remissions in insanity in different forms—and notably in general paresis, just as there are remissions in chills and fever. If called to see a case of intermittent fever, in the intervals of attack, we may assume that the patient is well, or nearly so. In one hour



he may be bathed in perspiration, with a high fever. In studying fevers, we visit the patient a number of times before we make out a diagnosis; but in studying insanity, the assumption is that a single visit is sufficient, even when we know nothing about the previous carriage of the patient, and therefore have no means of contrasting his present with his past and habitual behaviour, which is the most determining element of establishing the diagnosis of insanity. The mind, in mental disease, is like a March day, the intelligence being sometimes behind a dark cloud, sometimes shining full and clear, and again but slightly obscured, and rapidly changing from one state to the other. A little child runs out of the house on such a day when the sun chances to be shining, and he says to his mother, "The day is fair;" another little child runs out shortly after the sun goes behind a cloud, and he says, "The day is cloudy." It is in this way that we are too apt to make our diagnosis of insanity.

*Thirdly.* The Gosling case is suggestive, in its bearings on the causation of insanity. The leading exciting causes of general paralysis are supposed to be sexual excess, syphilis and intemperance; but no one of these, or all three combined, can avail to produce this disease, unless they act on a predisposed constitution, for, among savages and barbarians, and the semi-enlightened, all these influences are operating with far greater power than with us; indeed, in modern times, among highly civilized nations, drinking is a lost art, and smoking and excessive indulgence of passion are disappearing with the progress of refinement. Those who will go through the investigation to which I have made reference in my paper, and who will study thoroughly the customs of all races upon the face of the earth, will soon find that excess in the use of stimulants and narcotics is a survival of savagery, and disappearing, or at least being greatly modified, under the influence of civilization. In Ireland, where there is so much excessive drinking, there is almost no general paresis. The negroes of the South—many of them—drink excessively and indulge the passions excessively, and they are affected severely with syphilis, but they do not have general paresis. Indulgence in the passions is more likely to excite general paresis in a person who is moderately strong, than in one who is excessively weak and neuræsthenic; it is clear that Mr. Gosling was of a temperament that would likely, under the presence of exciting causes, develop general paresis.

*Fourthly.* This Gosling case enforces the need of distinguishing between experts and non-experts in science. In a series of papers on "The Scientific Study of Human Testimony, with a Reconstruction of the Principles of Evidence," that I published some years ago in the *Popular Science Monthly*, I defined an expert as "one who can see all sides of a subject;" a non-expert as "one who can see but one



or a few sides of a subject that has many sides." It takes the world a long time to out-grow the delusion that, because a man knows something about something, he therefore knows everything about everything. The evolution of knowledge implies an evolution in those who know—a differentiation of specialties and varieties of thinking, which are multiplying and must multiply inevitably with the growth of science and of society. It is not a criticism—it is a compliment to a man to call him a non-expert, since the very term implies that he is an expert on some other subject than the one in hand. If Diogenes were to go through our market place to-day with his lantern, seeking for an expert, he would have a far harder task than when seeking for an honest man; for you shall find a thousand persons who are willing to tell the truth in matters of science, to one who is capable of telling it. The question between the physicians in the Gosling case was one, not of honesty, but of expertness. The physicians who testified in that case that Mr. Gosling was not insane, gave clear evidence, before you, that they had not studied carefully the general subject of insanity, since some of the facts which they arrayed as proof of the sanity of their client was really the best part of the proof of his insanity. Thus, a long, legal document was triumphantly brought before you, and the fact that Mr. Gosling had been able to prepare such a document of such a length was assumed to be a *prima facie* evidence that he was sane; whereas, a real expert on the subject would have known that the preparation of these long, interminable and useless documents is one of the interesting evidences of insanity. Even though such documents be coherent and moderately intelligent, yet their length, combined with their uselessness, are often symptomatic of an unsound mind.

I once had an opportunity to study a case of insanity under remarkably advantageous circumstances. I saw the sun of intelligence slowly set—part of the time beneath clouds, part of the time shining full and clear, until it sunk into darkness. I saw it rise again, also, part of the time obscured, part of the time in full view, until it reached the bright meridian of health. Both during the descent and the rising, one of the leading manifestations was the preparation of interminable letters on various themes, frequently brilliant and interesting, but almost always needless and uncalled for. But a few days ago I received a long epistle from one of my patients, who was formerly in a condition of melancholia, but who has been very greatly helped by treatment. As soon as I saw the epistle, before I read it, I felt it to be a discouraging symptom that he should have prepared it. On reading it, I found it coherent and clear, but far more detailed than necessary, just as with the affidavit that Mr. Gosling exhibited to you. Many of these cases, indeed, write just as they talk—excessively and needlessly.



The time may come in the next century—possibly in the present century—when physicians everywhere shall be so well taught on the subject of insanity, in medical schools and in text-books, that all well-trained medical men shall be, in a degree, experts on the subject of insanity in its different forms, and shall be able to write and speak with a degree of intelligence upon it, and give testimony in court that shall be authoritative. But, at the present day, it is not so—cannot be so. Physicians feel that with insanity they have simply nothing to do. This very day I asked one of the most intelligent physicians I know—a man of large experience—if he would like to come in and listen to the discussion. He said the subject was one he cared nothing about; and yet he has more interest than the average practitioner in diseases of the nervous system; he studies them and treats them with intelligence and skill.

Mr. Clark Bell observed, the other evening, that this difference of opinion between physicians was a chronic difficulty, and the wonder was expressed that such a difficulty should exist. The reply is, that it is a law of nature that men should differ in their opinions, experts differing from non-experts, and experts differing among themselves. Remember that an opinion is, in the final analysis, but a thing of mathematics or chemistry—the product of a reaction between an objective fact and the mental organization of the individual who observes the fact. This may be illustrated on the board: Take the Gosling case, or any objective fact of nature, whatever it may be; call that, if you please, one hundred; add that to number one, and it makes one hundred and one; add that to two, and the result of it is one hundred and two, and so on. For these numbers substitute individuals—Brown, Jones, Smith, and Robinson—with different organizations, temperaments, modes of education, thoughts, feeling, ideas, experience, and philosophy of life and of science. The facts of the Gosling case, acting against these individuals, make different resultants; it would be a violation of Nature's basic law if there should be harmony and unity in the beliefs of men; and the impression which is made by this objective fact will vary with the degree of expertness or non-expertness of the observer. There are experts and experts and experts and semi-experts; and between the highest experts, on the one hand, and the lowest non-experts on the other, there are various degrees and relations of semi- and partial experts; for here, as well as all through, there is no dividing line. Nature makes no leaps, but grows or evolves. The facts in the Gosling case were a constant quantity; but the resultant of those facts, when acting on the minds of the experts and the minds of the non-experts, produced such different effects that they testified to directly opposite opinions. Had the physicians who were called in the case been composed entirely of experts, there would



have been among all substantial agreement, although, possibly, slight difference of opinion in some features; but the agreement would have been approximative, and sufficient to have decided the case. Approximative agreement of experts is all that is practically necessary in law or in medicine. In reply to the question whether this disagreement of experts must be a permanent fact for the future, this may be said: that on many points, as we obtain more and more precise knowledge, expertness will more and more tend to harmony and unity; on other points, concerning which approximate certainty shall not be gained, there will be a tendency towards divergence. Nothing is so unanimous as ignorance; and when men were absolutely ignorant of insanity, they unanimously regarded it as an evidence of the possession of evil spirits. Here then was that harmony of opinion which men are earnestly seeking, but it was the harmony of absolute non-expertness. As men begin to think and discuss and investigate, with even semi-scientific eyes, they begin to doubt and to differ and quarrel; thence follow opposing and clashing and inconsistent and antagonistic beliefs, which now are so apparent on the subject of insanity, and which have been brought into view very clearly in these three evenings' discussion. But on some points we are already tending towards unity. Mr. Spencer has somewhere expressed the thought that the unanimity of ignorance develops into the differences of the partially informed, and finally into the unanimity of the wise. In the progress of science, then, there is an involution and an evolution; divergence tends not only to greater divergence, but towards unity. In this special topic of insanity, there is no doubt that in the twentieth century there will be far greater unanimity of opinion in some of the central questions relating to it than now, although there will then yet be left a sufficient number of questions, as to the general and special problems, for differences and antagonisms and discussions.

*Fifthly.* The fifth lesson suggested by the Gosling case is, that the diagnosis of insanity in court should be *purely psychological*, and not at all physical. The mistake of both the experts and the non-experts in that case, was in taking the *physical* symptoms of Mr. Gosling into court; the drooping of the eyelid, the difficulty in articulation and the inequality of the pupils should not have been mentioned by either side, in that case, in court. The only diagnosis of insanity, Gentlemen, is by insanity—by contrasting the mental manifestations of the individual in health with the mental manifestations of the same individual in disease, and also with the mental manifestations of the average man in the same condition of life. Insanity is purely an affair of psychology; it is mental, and not physical inco-ordination, and it can be only diagnosticated by mental phenomena. We only know of the existence and quality of the force we call mind, as we



know of the force electricity by its manifestations. We only know of its existence and quality in health by its manifestations in health. We only know of the modifications the mind undergoes in disease by its manifestations in disease as contrasted with the manifestations of the same mind in health. Mind is not manifested by physical paresis, or paralysis, or neuralgia, or by any form of physical inco-ordination. The physical symptoms that are frequently associated with some of the forms of insanity, such as paralysis, tremors, circulatory disturbances of various sorts, anæmias and hyperæmias, local or general, are interesting and important as parts of the clinical image of insanity taken in connection with its accessories and incidentals, and, therefore, may be treated of in text-books and lecture-rooms, provided their importance be not over-estimated and the danger of relying upon them be clearly and distinctly understood. The facts are, that there is no consistency in the correlation of these physical symptoms with the mental disturbances; they may or may not go together; when there should be such interesting co-existence, they may be referred to as interesting illustrations of the picture which the combination of mental and physical disorder may assume, and nothing more. On the other hand, the brain may be ploughed with disease; a patient may be paralyzed and unable to move hand or foot or any individual muscle; sensation and motion of nearly the whole body may be destroyed; the doors to all the senses may be closed; the brain and spine may be severely and profoundly congested, or severely and profoundly anæmic, and yet the mental co-ordination be not *seriously* impaired. It is, therefore, unscientific to take into court for the conviction or acquittal of a person on trial for insanity—the methods of our court compel me to use these phrases—the purely physical condition of the patient; it is unscientific because the object of the trial is simply to find out whether the *mental* co-ordination is, or is not, seriously impaired; and it can have no other object; for however severe may be the physical condition, the law takes no cognizance of it unless the mind be disturbed. It is unwise to bring, therefore, our ophthalmoscopes, or our dynamometers, or our electric tests, or our æsthesiometers, or our sphygmographs, or our pismeters, or other means of positive diagnosis into court, in a case of suspected insanity; it is an unscientific procedure, and has been the source of gigantic confusion and false reasoning and prolongation and unsatisfactoriness of trials of this kind, particularly in the United States. Suppose that you were able to show, by these instruments, that the retina is severely congested, and, assuming, for argument's sake, that the retinal circulation is a necessary and trustworthy indication of the cerebral circulation; suppose you show that the muscles respond feebly to the electric test; that electro-muscular contractility is entirely destroyed; that sensation is



obliterated all over the body ; that the pulse beats feebly, and irregularly, and makes pathological tracings—you have not advanced one step, nor contributed one fact, nor shed one ray of light on answering the question or questions before the court—the only problem that is, indeed before the court—whether this man is or is not insane ; but you have opened the doors on all sides and in every direction, through which lawyers, expert or non-expert physicians, on the opposite side, may harass you, and confound your testimony, and defeat the purposes of justice, as they did in the Gosling case. Here is a wild man let loose in New York by the charge of the judge and the decision of the jury. I know, in reply, you say, that the judge was non-expert and the jury were fools. But stop, before we make these charges. Judges and jurors know no difference between experts and non-experts, on these themes, and assume that all physicians are alike experts ; they are brought up to that assumption—which is quite as erroneous as it is to assume that all physicians are experts on the subject of treatment of fractures and dislocations, or on the operations for cataract. And, furthermore, they instinctively know, and are soon taught in court, that these physical signs on which you so much rely, may all exist in full force, and far greater force indeed, than in the case before them, without there being any mental disturbance of a character sufficiently serious to incapacitate the person for the ordinary relations of life. I hear your objections to these reasonings—which I know are radical and new and revolutionary, but which the future, I am sure, will sustain, for they are in harmony with the scientific spirit of our time.

You say that these physical symptoms in general paresis, as in the Gosling case, are very often indeed found as accompaniments or incidents to the mental manifestations of the disease. Very true ; but they are not constant ; and they are not trustworthy. Out of one hundred and sixteen cases of general paresis, there were according to an article in the last number of the *Journal of Medical Science*, but seventy-three—but about two-thirds—who had unequal pupils ; and the other physical phenomena, analyzed in the same way, would very likely bring results not far different. On the other hand, you may have these physical symptoms in persons who are not general paretics, and are never, as long as they live, to have general paresis. During the past year I have had a number of cases of neurasthenia, particularly of hemi-neurasthenia, in which there was this drooping of the lid of a very decided and easily observed character, and in some cases irregular movements of the lips in speech. During the past year I have had a scientific man under my care, who has had at different times unequal dilatation of the pupils ; this is, indeed one of the symptoms, as I have pointed out in my writings on Neurasthenia, of the neurasthenic state. These symptoms—drooping of



the lid, unequal dilatation of the pupils, trembling of the lips, etc., and tremor of the hand when extended—when they appear in neurasthenic patients, are symptoms of neurasthenia pure and simple; are irregular usually, more or less, and inconstant—coming and going at different times; but if we see a patient but once, and see him with one or a number of these symptoms, we very easily infer that he may be on the road which leads to death through general paresis. But two or three days ago one of my patients afflicted with neuralgia came into my office with a very marked inequality of the pupils; the next day the pupils were normal. Judges and juries have a right to bring up these facts before you, and to meet your facts by these facts, if you refer to and insist on physical signs of insanity.

I anticipate your replies to all these reasonings. You say that these physical signs assist in making out the diagnosis, although they are not of themselves sufficient to establish the diagnosis of insanity in any case. But they do *not* assist in making out a diagnosis before a court, where the decision will turn on the responsibility or irresponsibility of the patient. Before a medical class you may point out these symptoms as indicating or constituting a part of the clinical image that general paresis presents in some cases, explaining at the same time that they are variable, irregular and inconstant, and that they are not of themselves evidences of insanity at all, any more than they are evidences of smallpox, since a person may have all of them and not be insane, and may be insane not having any one of them. *If you cannot make out a diagnosis of insanity by the mental manifestations alone, you cannot make it out at all*; these physical signs not only do not help you before the court; but they always will, and always must, harm you. Had the physicians on the other side been familiar with cases of neurasthenia, where the symptoms of falling of the lid, inequality of the pupils, trembling of the lips and arm appear and disappear, without advancing to any stage of general paresis, their legal victory over you would have been even more complete.

I hear your other objection. You say that you are unable to prove to the court the special form of insanity which the person is suffering from, unless you can refer, incidentally, to these physical symptoms, but the court has nothing to do with the special forms of insanity, with the names which we see fit to give them; all that the court wants to know or ought to know is, whether the person is or is not insane—whether his mental co-ordination is sufficiently impaired to deprive him of his liberty. Names are luxuries in such conditions, and are to be used cautiously and very sparingly, indeed, for this reason, if for no other—that the different forms of insanity, as we are getting to understand them more and more thoroughly, run into, and, overlap, and infringe upon, and complicate each other,



in ways innumerable and beyond mention. *The London Lancet*, in the strong editorial previously referred to, takes the just position that the legal side of insanity is, in a certain sense, distinct from its medical side—which is just what I have claimed.

I hear yet another objection. You say that these physical symptoms, although they of themselves prove nothing, yet are of incidental and supplementary use, and are thrown in to make out full measure, after you have gathered together the psychological symptoms. But these physical symptoms *do not* make full measure; they take away from the evidence we already have, and weaken all the force of your reasoning on the psychological side; and for this—that they divert the mind of those whom you would influence from the main and only question at issue—the sanity or insanity of the individual. Not long ago I passed a very pleasant evening in company with a number of the leading humorists of America. Among them was Mr. Burdette, the famous wit of *The Burlington Hawkeye*, who entertained us with a number of remarkable stories, told in a most interesting and amusing way, among the most striking of which was an account of a man who had heard that the sting of bees would cure rheumatism, and hired a boy to collect a bottle full of bees for experiment. The boy put in a wasp among the bees, in order to make full measure, and the point of the story hung on the terrible stinging which the man received from this wasp. Now, the physical symptoms of insanity, when brought into court, do not more make full measure—they are much like this wasp among the bees; they belong to a different order or species; they bring confusion, not clearness, to the subject; they weaken a strong case, and they do not strengthen in the least a weak one. In cases of insanity we can usually obtain psychological evidence sufficient to settle the case without difficulty, provided we have good opportunities for studying the mental manifestations of the patient; and, in the exceptional cases that are doubtful and difficult, the physical symptoms are not of the slightest service to help solve the problem—that is, for the purposes of the court or juries, where the question of responsibility, and only the question of responsibility, is to be answered. If, in private practice or before medical students, we see a man with prominent and physical symptoms that indicate the coming on of general paresis—that is, when they are fixed and stable, and not, as in neurasthenia, changing, inconstant, fluctuating—we may make a probable, perhaps a positive, diagnosis of the early stages, if you please, of that disease, even though the mind be apparently sound and clear; but in court, such symptoms would have no weight, and should have none, for courts cannot and ought not to condemn a man in advance for insanity, even though we know, or think we know, that some day he is to be insane; law takes cognizance of what exists—



not of what may happen. If we cannot condemn a criminal for a crime that he is going to commit, but has not committed, we certainly cannot condemn a man for insanity before he is insane, nor can we legally restrain him because sometime or other he may be insane. *We may be justified in condemning a man scientifically, when we have no right to condemn him legally.*

In the Gosling case, before us, there was, according to the statement of the experts, evidence enough ten thousand times over—of a psychological character purely—to prove that he was insane, without referring in any way, directly or indirectly, to the physical symptoms; and, if the experts on that trial had confined themselves strictly to the psychological symptoms, there might have been a different issue to the trial. You had only to allow that man to talk or write long enough and he might, according to your testimony, have filled the court-room with proofs of his insanity, so that the very walls would have strained under the pressure, and judge and jury, for relief and self-protection, might have convicted him; but, when you introduced symptoms of *muscular* inco-ordination as proofs of *mental* inco-ordination, you implied—though *you* did not say it—that the mental symptoms were insufficient and needed to be pieced out to complete the chain of evidence; and, quite naturally, if not inevitably, the judge and jury so interpreted you, and give the prisoner the benefit of the doubt, as legally, from their point of view, they had a right to do.

*With the clinical image of history of insanity the Courts have no concern. The law makes inquiry only of legal irresponsibility, as the result of mental inco-ordination. The mental inco-ordination may be absolute, while the physical co-ordination is perfect; the physical co-ordination may be almost destroyed, while the mind is but slightly, if at all, impaired.\**

There are many other physical symptoms connected with insanity, and to which the insane, in the various stages of their malady, are liable, and which, thoroughly studied, may be regarded, in a sense, as parts of the clinical image of the disease, and therefore are very pro-

\* At the conclusion of these remarks Dr. Hammond asked me whether I would not, in a case of acute mania, speak of the redness of the face as a proof of the mania? From his point of view, no question could have been more unfortunate. My reply to this is very decided: "By no means!" If you cannot, in a case of common raving mania, make out the diagnosis of insanity from the psychological symptoms alone, you cannot make it out by redness of the face, or by any other accompanying incidental physical symptoms. This question alone shows how important this branch of our subject is, and how little it has been studied. The Judge on the bench and some of the jury might have faces as red as the most raving maniac, and from various causes. I am not infrequently consulted by various patients afflicted with neurasthenic symptoms, who regard constant or very frequent attacks of severe redness of the face as one of the most distressing symptoms they have. Before any court in any question of responsibility, whether after committing a crime, or after making a will, or in case of contested wills, if the psychological symptoms alone, when carefully studied, do not suffice to make out a diagnosis of serious mental inco-ordination, the patient should have the benefit of the doubt, if there be any doubt. He is supposed to be sane until he is proved to be insane.



perly referred to as such in lectures and text-books and in general treatises on the subject of insanity. Among these symptoms are suppression of the menses, excessive sexual excitation, dryness and stiffness of the hair, constipation, offensive breath and perspiration, and, I may say also, neurasthenic and anæmic states of the system; but no one brings up these symptoms in court to prove a case of insanity; they are instinctively recognized as incidental and as physical symptoms, and not at all as proofs of mental unsoundness; but these are just as truly proofs of insanity as falling of the lid or inco-ordination of the muscles of speech, or cerebral congestion, or redness of the face, or paralysis, or any form of physical disturbance whatsoever that may coexist with certain varieties and stages of insanity. On the other hand, insanity in its most furious forms may coexist with almost absolute physical health; there may not be the slightest suggestion or intimation of any disease, except that which is learned through mental manifestations, and through contrasting the mental manifestations of the individual in disease with the mental manifestations of the same individual in health; the patient may be able to walk immense distances, do severe and violent labor, may sleep soundly, eat heartily and digest well; every function, or nearly every function, apparently being fulfilled perfectly, except the psychological functions. For the same reason the photographs of the insane, no matter how carefully taken or how carefully studied, are of little or no use in the diagnosis of the different forms of insanity, and any man who should attempt to make the differential diagnosis, out of one hundred photographs thrown promiscuously among a similar number of photographs of persons in health and a similar number of persons with various other forms of nervous diseases, would find himself seriously blundering. Mind acts on body in disease as well as in health, in insanity as well as in other nervous diseases; but it does not produce in the face, or in any portion of the body, any such precise, inevitable and diagnostic impressions as can be of value in the study of cases before the court, the only object of which is to find out whether a person is or is not responsible.\*

*Sixthly.* The Gosling case enforces the propriety and wisdom of frankly confessing our ignorance before the court. The law can compel us to go into court when we do not wish to do so; but it cannot compel us to say we know when we do not know. One of the witnesses in the Gosling case stated that he was compelled to go

\* While this paper is passing through the press, I am consulted by a patient who has trembling of the lips and tongue, difficult articulation, trembling of the hands, that are constant and persistent, and do not yield to treatment. My diagnosis is incipient general paresis, and yet his mind, though somewhat affected—especially in enfeeblement of memory—is not yet enough affected to call him insane at present, whatever his future may be. He has no delusions of grandeur and no severe depression. My friend Dr. Bryce, of the Alabama Insane Asylum, happened to be in my office when this patient called, and after investigation coincided in the diagnosis.



into court; but when there he could easily have said that he knew nothing of the matter, and could not tell whether Gosling was sane or insane. Such a confession would have been not discreditable, but in the extreme degree creditable, and would have helped the court in arriving at the truth. But not only non-experts and partial or semi-experts, but experts themselves, even those of highest order, must sometimes find it imperative to openly declare in court, as they would declare in private, that they are not able to say positively whether the individual under consideration is or is not insane. In many cases we do not have the back-ground of the previous character of the person and his history against which to place his present behavior as a contrast, to see whether he is or is not insane, and without this back-ground the image of his character is not strong and clear and positive enough to put it within our power to make the differential diagnosis. I could recite a number of cases of that kind which have fallen under my observation. Very recently—since this subject has been under discussion before the Society—a physician called upon me with an immense manuscript on nervous diseases which he wished me to read and give an opinion upon in order to aid him in finding a publisher. He said he had previously consulted Dr. Austin Flint and Dr. Hammond, and in Chicago and other cities a number of medical men with whom I was acquainted. Dr. Hammond says that he has never seen the person. This, however, does not help me out of the difficulty, which is, that I do not know, after having seen this person three times and looked over his manuscript and talked with him on various questions, whether he is a lunatic or simply an enthusiast. If any person in this room with whom I am acquainted should bring me such a manuscript, and make such assertions and express such wild hopes as this man did, and do this seriously, I should know at once, without any other evidence, that he was insane. But of this man I know nothing, except in these visits he has made to my office; and yet my opportunity for studying him has been much superior to that which, perhaps, the majority of physicians get for the study of cases of insanity where a certificate is required, or where they are to give evidence in Court. Two or three years ago I had under my care a gentleman who was addicted to the chloral and opium habit, and who professed to be engaged in great enterprises for the sale of Texas land to the Mennonites. Dr. Hammond saw the case before me, he saw the case with me, and will recall it; I have talked with other neurologists who saw him. I had abundance of opportunity to study this case, and yet, with all the facts that have been brought to me regarding his previous character and history, I do not now know whether he was sane or insane. As the patient is now dead it is not probable that the question will ever be



settled. The problem was reduced to this—whether he was one of the most acute and accomplished swindlers of this age, or simply the victim of extraordinary delusions, or was it a combination of the two that accounted for his performances? I wish I could answer this question. I would give much to be able to answer it; but I cannot give a positive opinion, and, if called upon in Court in this case, I should say frankly that I did not know, and at the same time should be obliged to confess that I had unusually good chances for finding out. I have consulted with many of his most intimate and many year-long friends, with his wife and legal advisers and companions, and I got no information that helped me in solving the problem.

It is often stated that expert testimony is scorned and sneered at and snubbed in the most remorseless, disrespectful style, by courts, and is a matter of reproach and jeering among the people. If we would raise the standard of value of expert testimony, both real and accredited, it would seem that these four reforms are needful :

*First*, to have a good, short, clear, comprehensive and common sense definition of insanity, and to use it in court. A definition of that kind is presented in this paper.

*Secondly*, to recognize, and insist on the recognition of the fact, that a general knowledge of medicine does not imply expertness on the special subject of insanity, any more than it implies expertness in microscopy, or chemistry, or surgery.

*Thirdly*, a recognition of the fact that insanity is purely a psychological disease, and is to be diagnosticated by purely psychological symptoms—that is, the mental manifestations of the patient in disease as contrasted with the mental manifestations in health, and also with the mental manifestations of the average man. If sufficient evidence of a psychological character cannot be obtained to condemn a man for insanity, he should have the benefit of the doubt, and be allowed his freedom until sufficient evidence is obtained; and if we attempt to help out a weak case by a reference to physical symptoms, we do not help, but harm our cause.

*Fourthly*, confessions of ignorance in cases where we are ignorant, with a scientific and clear statement of our ignorance. This obligation is laid both upon experts and non-experts when called into court.

*Seventhly*. The Gosling case finally suggests and enforces the long felt need of reform of our Lunacy Jurisprudence. When we were arranging for the Cooper Union meeting in behalf of the insane, one of the best known judges of the city, to whom the matter was referred, declared that his thirty years' experience on the bench here, had taught him that the whole system of Lunacy Jurisprudence should be reconstructed. Whether this extreme claim is valid or



not, I will not attempt here to judge; but all of us must unite in calling for a new departure in the method of calling experts. Here, as in France, the experts should be employed and paid by the court. Under such circumstances, they could examine cases with thoroughness, and give the results of their examination in such a way that there should not be even a suspicion of partiality, any more than in the case of the judge himself.

The inquiry in regard to the emotions of savages was very properly raised. The answer to the problem is: *First*, The relative quantity of the emotional nature, as compared with the intellectual nature, is greater in the savage than in the highly civilized. Representing the emotional and intellectual nature by the arbitrary number one hundred, the savage would have, we will say, seventy-five per cent. given to emotion, and only twenty-five per cent. or less given to the intellectual, while in the highly civilized it would be reversed, or at least very different.

This arbitrary illustration makes clear what I mean.

*Second*, The emotions of savages, like their sensibilities, are dull and heavy, and require far more forcible excitation than the emotions of the highly civilized. Give one of the negroes of the South a biscuit, and he will allow you to flog him as long as you wish; and with savages generally the world over it is necessary that to inflict pain you should use some sharp instrument that will pierce beneath the skin. The North American Indians make a specialty of stoicism in the presence of enemies; but among themselves and by themselves they lead an entirely emotional life, as all experts and travelers familiar with their customs, with whom I have consulted on the subject, agree.

In regard to the thoroughness of my study of the customs of savages and the diseases among them, it is proper that I should say that I have read hundreds of works of travelers among them, and have almost, if not quite, exhaustively canvassed all those facts in relation to all the nations of the earth that shed light on the nervous system. My opinion does not make science—science is only science when it is brought into a verifiable state. All that I claim in regard to the nervous condition of savages can be verified by those who have opportunities of obtaining knowledge on the subject.

I gave much time to this study at the period I was making these researches. I did what I never did before, and would never do again; that is, gave a whole Summer vacation to the inquiry. On this particular subject my researches were, I think, fully as extensive and trustworthy as those which Mr. Herbert Spencer has since made in his work on Sociology. I did not content myself with merely studying the works of travelers, but corresponded extensively with persons qualified to observe in different parts of the world, and consulted



specialists in personal interviews. My conclusion is that if, outside of pure mathematics, there is any fact of science that can be absolutely proved, it is this, that among savages and barbarians insanity and allied nervous diseases, although they do exist to a certain degree, are very rare indeed; and that they increase and multiply, developing new phases and varieties with the progress of civilization. No man that travels over the road that I have traveled in this inquiry can come to any other conclusion—it is outside of the range of discussion, dispute or doubt. To him who becomes expert on this subject, this is as demonstrable as the Copernican theory to astronomers. You say these travelers are non-experts; but it does not require an expert to make a diagnosis of insanity, in the majority of cases. Even in civilized lands, a diagnosis of insanity is usually made by the friends of the patient, and correctly made. It is only the masked, intermittent, subtle forms that require expert skill. You do not ask for a microscope to see a mountain. A traveler coming to a great river like the Mississippi does not need to make a chemical analysis of the water in order to assure himself that he has found a river. An army of lunatics let loose in a savage or semi-savage society would be diagnosticated in five minutes by every one within sight or hearing. It is said that savages kill their lunatics; but this is true only in a very limited degree. Indeed, if I were suddenly taken insane, I would rather take my chance with many savage or barbarian tribes, with the water-cure which they sometimes employ, if near rivers or other streams of water, than in many of the asylums of the civilized world.

Of the statistics of insanity, in reference to which there has been some discussion here, and to which also I referred in my paper, this, first of all, may be said: that prophetic statistics in regard to the increase of insanity must always be considered with reference to the influences which are to counteract the present rate of increase in civilized countries.

When the President of the British Psychological Association states that in the year 1912 there will be a million and a quarter lunatics in Great Britain, he might also state that emigration will probably check this increase to a very important degree. England is overflowing to America and Australia, and Africa is to be opened to civilization. These facts, taken in connection with the facts generally and specially referred to in my paper, will make it impossible for the dark and dreary prediction to be fulfilled. It is, however, quite right to say that, at the rate of apparent increase during the past forty years, if such rate of increase were not in some way checked or modified, there would be a million and a quarter lunatics in Great Britain. It has been said that statistics of the increase of insanity are not entirely trustworthy, because they are much more care-



fully collated than formerly. The insane have not been put in public institutions, but allowed to go at large. This suggestion is true in itself, but it is not the whole truth, nor anything like the whole truth; and it does not account for the remarkable figures relating to insanity, in regard to which all statisticians substantially agree. This consideration will, however, have more weight in the future than during the past twenty-five years; for it is probable that there will be, during the next quarter century, no great improvement on our present system of gathering statistics of the insane. Statistics must under-state rather than over-state the numbers of insane, for they cannot include the large numbers of those who, though insane, are kept at home, cared for by their friends, and allowed to go at large—not under any special supervision or restraint. All physicians are liable to have under their care persons of sufficiently unsound mind to be regarded as insane, who still are not sent to any public institution.

This varying and fluctuating insane population probably constitutes, in all civilized countries, full one-quarter of the whole insane population. Statistics can guess at these, but cannot accurately estimate them.

It is probable that there are in this State at all times, all the way from ten thousand to thirteen or fourteen thousand of insane persons, in and out of public institutions; and it is not, probably, a wild prediction to make, that before many years there will be, in this State alone, twenty-five thousand; sufficient for a very considerable city. At the present time, the proportion of the insane to the sane, in the densely populated portions of civilized countries, is all the way from about one in four hundred and fifty to one in three hundred and fifty. Taking all the facts into consideration, all the qualifying and modifying factors, both actual and prospective, it is quite probable that this proportion among certain classes, and in certain countries, may be, after a time, diminished, and that the figures may be less dark and gloomy than they now are.

Inquiry has been made here in regard to alcoholic trance and inebriety, and statements have been made in regard to these conditions, which at this stage of our knowledge of this subject, should not have been made; certainly not by those who are familiar with the nervous system.

There is such a condition as alcoholic trance; but the nature of that, and the nature of trance in general, is a theme too wide, too vast and too interesting to be discussed here, at this late hour.

It is expected that a paper will, during the year, be read to this Society by Dr. Crothers, and, if he should fulfil his promise, we shall have another refreshing occasion like the present.

Of the nervous disease inebriety, this may be said briefly, at this point—that it is no more like the vice of drunkenness than smallpox is like epilepsy—the vice (drunkenness), and the disease (inebriety), have nothing in common except the use of the narcotic. This also is a subject too broad, complex and important to be discussed at this moment. I may, perhaps, be allowed to say that I gave a paper on this subject last year, before the British Medical Association at Cork, wherein I presented the differential diagnosis of inebriety, and also indicated the importance and practical points of its causation and treatment. This paper will soon be published in detail, in a form accessible to all who are interested in solving this great and growing problem of our time. One might as well deny that there are any such diseases as epilepsy, dyspepsia, neuralgia, tetanus, neurasthenia, anæmia, hysteria, typhoid fever, diphtheria or consumption, as to deny that there is the nervous disease inebriety. The vice of drinking is, undoubtedly, far more common in Great Britain than it is here, and in this country its worst manifestations are among Europeans who have recently emigrated here. Native-born Americans are the most temperate people on the globe.

In the history of mankind outside of Mohammedanism, there is no precedent for the approximate abstinence from alcoholic liquors that is observed among Americans, especially the brain-working class. But at the same time, there is no country in the world where, in proportion to the population, there is so much of the nervous disease inebriety, as in America; and it prevails among those classes where there is the least drinking. You say this is a paradox—but the problems of insanity bristle with paradoxes. All new truth is paradoxical when first announced, or to him who first hears it. The office of the original thinker in science is to harmonize paradoxes; for, as Frederick Maurice has wisely said, “All progress is through opposites to their reconciliation.”

The question has been asked here to-night why so many farmers are insane—why so few of our intellectual classes are in our Asylums? One answer, in addition to those already brought forward, is, that we have more farmers than intellectual men among us. In this country, there are, probably, three million farmers, and a large population of mechanics and workers, while the literary classes must be counted only by hundreds of thousands.

A purely intellectual life is one of the best antidotes to insanity. A philosopher, though he may have no offspring, or those of an incompressible and sensitive temper only, is less likely himself to have mental disease than the emotional and uneducated mechanic or laborer. The man who thinks for himself on noble themes, and works out for himself the philosophic problems of life, has so few rivals in his generation that he escapes the friction which drives to



madness the pressing crowd in the lower ranks and classes and stages of activity. The world can wait for philosophy, and the philosopher can wait for its utterance ; while in the strife of business and professional competition there is constant imminence of care, anxiety and over-toil.

The poet, Thoreau, expressed it with beautiful conceit when, on being reproached for being so much alone, he replied : "It is not so much that I wish to be alone, as that I wish to soar ; the higher I soar, the thinner grows the audience, until at last I am left almost alone."

It has been said here that revivals of religion are active with us to-day, and that the emotions of our people are thereby kept in exercise. There are, indeed, revivals of religion at this day ; but as compared with the revivals of the past half century, they are but as ripples in an inland lake to the rolling billows of the Pacific. Those who will read the history of revivals in this country, will learn that in the early part of this century, and even later, they excited an anxiety, earnestness and persistency in nearly all ranks and classes of society of which we in this generation know nothing. There are men now alive who can, from their own memories, confirm this.

The revivalist, Whitefield, would have, it is said, an audience of thirty thousand ; and in Kentucky and other Western States, as you will remember, a season of religious excitement was attended by choral attacks which spread by psychical contagion among vast populations. We have elections now, and, sometimes, very exciting elections ; but they are mild, polite and indifferent compared with the elections of twenty-five or thirty years ago. Half a century since, the population of this country was concentrating almost its entire cerebral force on trying to answer these two questions—"Who shall be the next President?" and, "Where shall we go when we die?"

These questions are asked now with eagerness and anxiety, but with incomparably less eagerness and anxiety, and far less universally and with less exclusiveness of attention than they were asked by our fathers. Formerly men were other-siders ; now there is an increasing number of this-siders. The kingdom of this world has extended ; the rise of science has brought a new factor into civilization ; one of the results of which is, the crucifixion of the emotions and the exaltation of the intellect. Whatever evil effect the extension of the empire of the demonstrably true may have on the future of society, it cannot fail to have, for the present time, a good effect in the development of the intellect, and, so far forth, is tending to diminish insanity and allied nervous diseases.

Politics and religion both exercise and are yet exercising the best faculties of the best intellects in the world ; but elections and revivals exercise chiefly, if not exclusively, the emotions of those who are mostly influenced by them.

It is a practicable and inevitable inference from the philosophy of this discussion that there should be degrees of punishment for degrees of responsibility in the insane. Just as there are gradations between sanity and insanity, so are there gradations between the different forms and phases, types and stages of insanity; and the responsibility of insanity is itself a matter of degree, and not of precise measurement. Many years ago, a distinguished member of this society, David Dudley Field, Esq., read before you a paper on this theme, wherein he advocated with logical clearness the necessity of providing degrees of punishment for degrees of responsibility. The insane may be wholly irresponsible, partially irresponsible, be slightly irresponsible, or quite responsible for their acts. Each case must be studied by itself, in the light of our definition and our general knowledge of the subject.

For a correct solution of the problems of insanity it is necessary that physicians in general should make themselves familiar with the early and premonitory symptoms, and especially with the diseases which lead to insanity, which are on the road in that direction.

Every Spring the question is asked: What shall the young physicians who are sent out from our colleges do for a living? Where are the patients to be found for them? A partial answer is here suggested: let them prevent insanity; let them cure the early stages; let them relieve those primal conditions which, even if they do not develop actual insanity in an individual sufferer, will probably become insanity in his offspring. The whole family of neuroses, to which some forms of insanity belong—in which neuroses, hay-fever, inebriety, epilepsy, hypochondria and hysteria are included—has been almost as entirely unexplored by physicians as the North Pole. These diseases are not only common, but increasingly common in our civilization, and are especially frequent in this country. They can be treated and treated with a good degree of success by those who will take the pains to investigate and master their nature, their therapeutics, and their hygiene. The medical schools and the majority of text-books give us little or no information on these subjects, and young students are very likely to do as they have been taught—laugh at and deride the victims of these diseases, regarding their sufferings as largely fanciful, not suspecting that the victims or their descendants are liable to suffer from epilepsy or insanity, or some grave form of disease that no one feels disposed to ridicule. Until this branch of science is taught in our schools and text-books young physicians will be forced to study it for themselves, with whatever guidance they shall be able to obtain from monographs and fragmentary literature; and, to those young men who are resolved to make themselves experts in this realm, I would offer this suggestion: that mastership here, as elsewhere, is the result, not of seeing many cases, but of seeing a few cases thoroughly.



Any physician who can take a dozen cases of the neuroses of the family to which I here refer, and correctly and completely diagnose and prescribe for them, is an expert in this department, no matter if he should never see another case. While fitting for college in Phillips' Academy, at Andover, Mass., under Dr. Samuel H. Taylor—who was to this country and to that Academy what Arnold was to England and Rugby—we were so thoroughly taught the first six lines of Homer that we could repeat them with ease, and could answer almost every conceivable question of philology or history suggested by them. All the rest of Homer might be neglected; we must first be absolutely sure of those six lines. That simple principle of thorough and exhaustive study carried into science makes the highest order of expertness. There is no physician, young or old, who does not see a sufficient number of cases of premonitory insanity, or diseases that lead or belong to insanity, to make himself master in this realm of practical medicine. It is not the chiefs of asylums, nor specialists in the nervous system alone; it is the country doctor, in scattered districts of the mountain, far out on the prairies, on whom shall ultimately rest the practical solution of this sociological problem.

Greatness of opportunity does not imply greatness of results, else the scientific study of insanity would have been at least half a century in advance of its present state; we have abundance of material but paucity of men; mastership is everything in the offspring of opportunity wedded to capacity.

A fact on the practical side of this subject is, that the insane, unlike all other chronic invalids, can do nothing for themselves; and, if the profession neglect them, as they have, they must suffer from that neglect; and there is no direction in which they may look for relief except from philanthropists, and from the officers and managers of asylums. There are other diseases, to which I have several times referred in this discussion, that have been even more neglected than insanity. Inebriety is one, hay-fever another, neurasthenia another; but those who are victims of these maladies can, in a degree, look out for themselves; if the profession will not help them, they can, at least, have the privilege of going to charlatans; and if they fail them, they are at liberty to travel, and can in a degree control their own hygiene. For the past few years, as you are well aware, there has existed in this country, a large and prosperous association called "The United States Hay-Fever Association," composed entirely of hay-fever sufferers, who, finding that medicine could do, or at least was doing, but very little for them, resolved to take the matter into their own hands, and organized themselves into a society, the objects of which should be the obtaining information from every source relating to the cause, the nature, the hygiene, and

the proper treatment of this remarkable and interesting disease. In this organization are a number of medical men, who are themselves sufferers from this disease ; and the Association has among its members some of our most able and intelligent lawyers, men of business, and literary and scientific men. This Association has been of high value to sufferers ; and the result of their studies and efforts has been a gradual but sure advancement in our knowledge on this subject.

Now there are in this country, according to the best estimates possible on such questions, about as many insane as hay-fever sufferers—that is, upwards of fifty thousand—and if the insane could do for themselves what the hay-fever sufferers have done, there would be little need of committees or associations for the protection of the insane ; but insanity, by its very nature, takes away both the liberty and the power of organization. Among the laity only the near relatives and friends of the insane realize any direct and pressing interest in insanity ; but most of these are poor—some are made poor by their efforts to support their insane dependents—and the poor, whether sane or insane, have little influence. We must therefore fall back on the profession, and on philanthropists. Laymen who are themselves liable to be sufferers, or whose friends are sufferers from insanity, ought to co-operate in this work. This very Summer there is to be formed, as I take pleasure in informing you, a National Association for the Protection of the Insane, the objects of which shall be to obtain facts and compare experience that shall aid in the solution of the great and important problems of insanity, and the diffusion of such knowledge through society. In this work the harmonious co-operation of science and philanthropy is invited.

As the subject of insanity is full of paradoxes, so our discussion here has been full of coincidences. There are now two Bills relating to insanity before the New York Legislature, both of which ought to pass. One of these Bills, which provides for the increase of power for the State Board of Charities, and increase of its membership through the addition of experienced physicians and lawyers, so as to make it somewhat similar in supervisory powers to the successful Lunacy Commission of Great Britain, has just been defeated in the Assembly by a small majority. This Imperial State of New York, rich to overflowing in more than a century of traditions of liberty, with its population of five millions, and its prospective insane population of at least a quarter of a hundred thousand, has again fallen on its knees in humble obeisance before one man and one asylum. All this came to pass, I suppose, that it might be fulfilled, as was written in the paper to which you did me the honor to listen, “the just shall be conquered by the unjust.” All scientific, as well as popular advances, that slowly lift mankind out of barbarism towards a higher civilization, usually begin with a series of Bull's Runs.



We are entering a campaign where Vicksburg and Richmond are far in the distance. The inertia of the profession and of the people, their indifference to and dread of everything relating to insanity, is, in part, the philosophy of the interesting fact that this free and happy Republic is governed largely by its asylums, whereas, in the "decaying monarchy" of Great Britain the asylums are governed by the Government. In all legislative matters that pertain to lunacy, the Capitol of our State, as you are all aware, is, and for years has been not at Albany, but at Utica. One of the promoters of our Bill before the Legislature gave us this instructive advice: "If you had lobbied one-half as hard for this Bill as your opponent has lobbied against it, you would have carried it."

In regard to the question asked, I believe, by Dr. Spitzka, as to the details of the new methods of treatment introduced by me in asylums, I will reply, although the subject is a mere eddy in the stream.

By the invitation of my friend, Dr. R. L. Parsons, who is with us to-night, I visited the Blackwell's Island Asylum, when he was superintendent of that institution, and illustrated the different methods of general faradization and general galvanization. This was a number of years ago, when these methods of using electricity had been but recently introduced to the profession, although the use of electricity by other methods had been used long before.

Dr. Parsons carried out these methods in his institution, and with a degree of success that was encouraging. He found them of use in treating the various morbid symptoms associated with insanity, more than in insanity itself. He was, however, like all those connected with asylums, not sufficiently provided with assistants to carry out these methods permanently.

I also used these methods at Bloomingdale Asylum, when Dr. Brown was presiding in that institution. By invitation of my friend Dr. Judson B. Andrews, of the Utica Asylum, I illustrated these methods on patients in that asylum also a number of years ago. About the same time I had much correspondence with Dr. Bryce, of the Alabama Insane Asylum, in regard to this same subject. He carried out these methods in his institution more thoroughly than has been done in any other Asylum in this country, so far as I know, and he obtained results of a more positive character than have been obtained in any other institution, so far as I have been able to learn. Under date of February 17th, 1873, he gives the general results of his observations in the following language: "We like it; find it beneficial in most cases, valuable in the majority, and indispensable in certain forms of hysterical insanity, in primary dementia, and neurasthenia." Dr. Bryce, however, like all asylum officers of this country, found it very difficult, with the immense labor on his hands,



and insufficient assistance, to carry out these plans of treatment as fully as he might have desired, and he so expressed himself in a letter to me.

I answer this question in regard to the introduction of these methods by me, not for my own glorification, but because it was courteously asked, and may be properly replied to. I referred to that subject in my paper merely to show that I was on friendly terms with the officers of asylums, and that whatever I had to say in criticism of asylums of this country was not dictated in any sense by personal considerations. At the present time a number of those who are connected officially with asylums are in full accord with the spirit of progress on this subject. I hope the time may come, and I believe it will come, when this can be said of all of them.

I may further say in connection with this theme, that a number of years ago I published in a London Journal of Mental Science a paper in which the methods of treatment here referred to were described, and recommended.

A suggestion has been offered here that this Society cannot endorse all the statements that have been made in the paper which has been read before you. To this I reply, this Society was not founded for the purpose of endorsing the views that are presented before it. If you wish views that can be unanimously endorsed, you can find them on every street corner.

When your President, some months since, requested me to present a paper before the Society, and when, in reply, I stated that I was too much occupied to prepare a special paper, but might give one on which I was then engaged, and which was being prepared for another purpose, and he requested me to first read it here, your responsibility as a Society ceased; for the views expressed, whether right or wrong, old or new, the author is alone responsible, just as my critics are alone responsible for any error or any truth in their criticisms. The object of reading a paper here is not to obtain endorsement, but to obtain criticism and suggestion, to awaken antagonism, if you please, and the freest possible expression of opposing views. I should wish to write my resignation in advance, to take effect at the time when this Society shall have so far fallen from its original principles as to feel it to be its duty to endorse the views of those who address it.

Your President, in calling my attention to the date of this special meeting, expressed the hope that on this occasion some important points relating to insanity might be settled. In reply to this, I may say that this entire discussion, so far as my part in it is concerned, will have been a failure if it shall not have succeeded in bringing into full and clear and strong relief this one central thought—that



all our knowledge of insanity, like all human knowledge, is not and cannot be absolute, but is and must ever be relative to the human knowing faculties, and therefore relative to the differing and varying faculties of the individual. Before there can be entire agreement in regard to the problems of insanity, Nature must resign her sovereignty and allow her laws to be violated.

But if we cannot agree to any articles of faith, we can, at least, understand why it is impossible that we should agree; and that fact itself is a contribution to psychology. If the human brain be too limited in its forces to ever hope to know what insanity is, it can and will concentrate its energies in the attempt to learn somewhat of its multitudinous phenomena, and to organize these into science. If the minute pathology of mental inco-ordination must forever remain as far out of the reach of even the best aided senses as are the uttermost stars of the universe, the wondrous manifestations of that pathology are yet fast becoming the rich possession of mankind. If the differential diagnosis of sanity and insanity be oftentimes difficult and doubtful, and most of all to him who is best informed, yet out of that very difficulty an unprecedented order of expertness is now arising, and is destined to arise.

If, in the future, as in the past, insanity is to be a measure of our civilization; if every increase in the illuminating power of the mind is but an increase of surface to be eclipsed; if each fresh discovery or invention is to be matched by some new diseases of the nerves; if insanity and its retinue of neuroses, through the cruel law of inheritance, are to be organized in families, descending in fiery streams through the generations, we have this assurance: that the same science, with keen eyes and steps that are not slow, is seeking and is finding means of prevention and relief, if not of cure. If it must yet be said of some of our asylums that they escape censure only when they escape observation; there are others, public as well as private, that are beginning to realize that they are living not only in the Nineteenth Century, but near the borders of the Twentieth, and are coming into full sympathy with the spirit of science and humanity.

Finally, if we cannot agree to any other general proposition, surely all must agree to this: that the more deeply and thoroughly we study the problems of insanity, the more do we feel the need of being inspired always by the aphorism of Confucius, the wisdom of which all scientific and all philosophical advances make the more apparent and important: "What we know to know that we know it, and what we do not know to know that we do not know it—that is knowledge."